

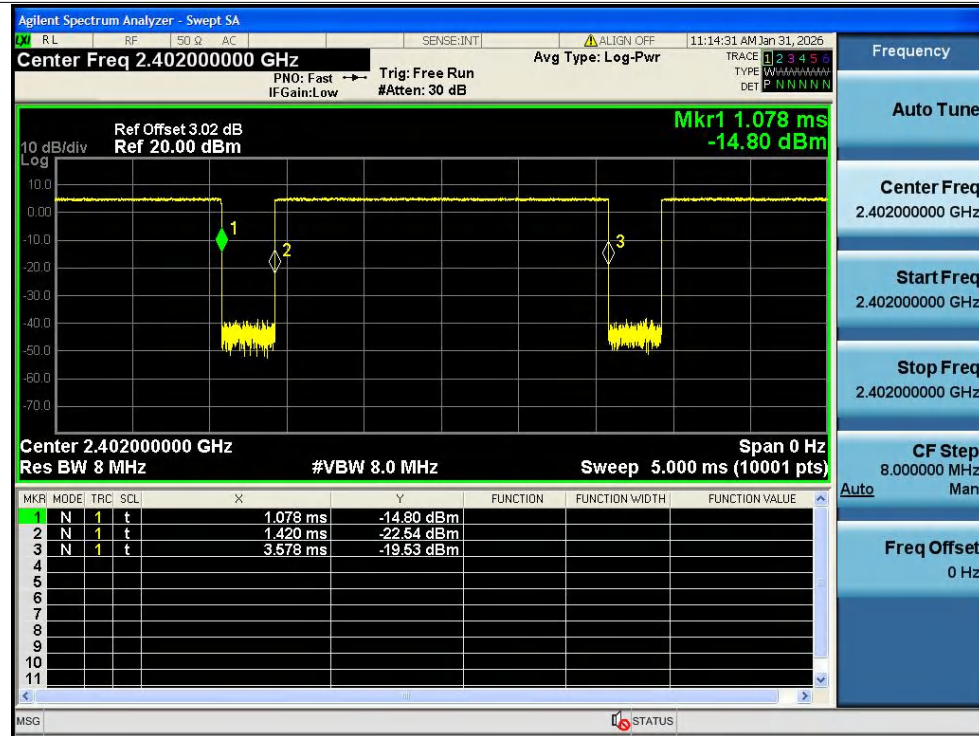
Appendix E BLE

Duty Cycle

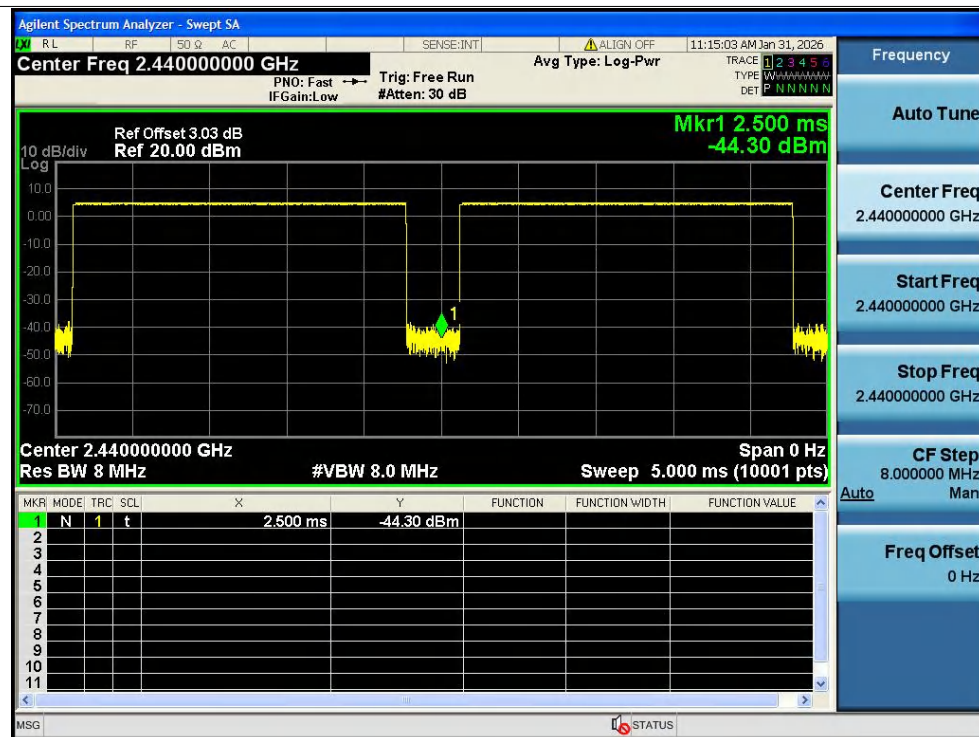
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 1M	2402	Ant1	86.32	0.64	0.46
NVNT	BLE 1M	2440	Ant1	86.33	0.64	0.01
NVNT	BLE 1M	2480	Ant1	86.32	0.64	0.46
NVNT	BLE 2M	2402	Ant1	86.3	0.64	0.01
NVNT	BLE 2M	2440	Ant1	86.31	0.64	0.01
NVNT	BLE 2M	2480	Ant1	86.28	0.64	0.46

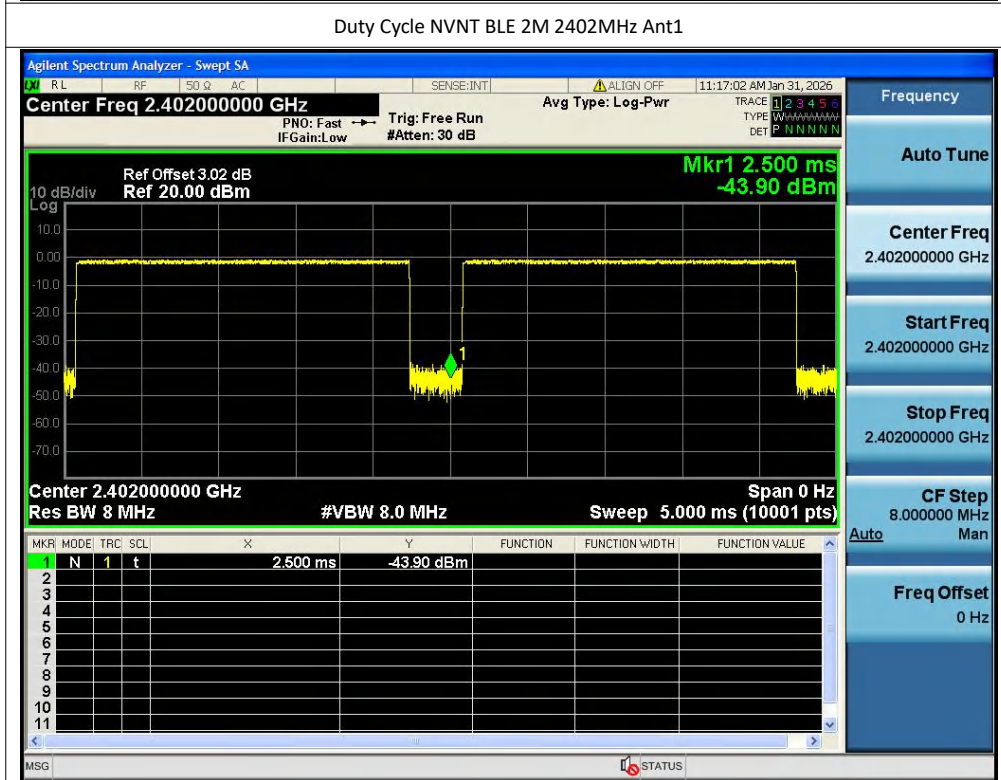
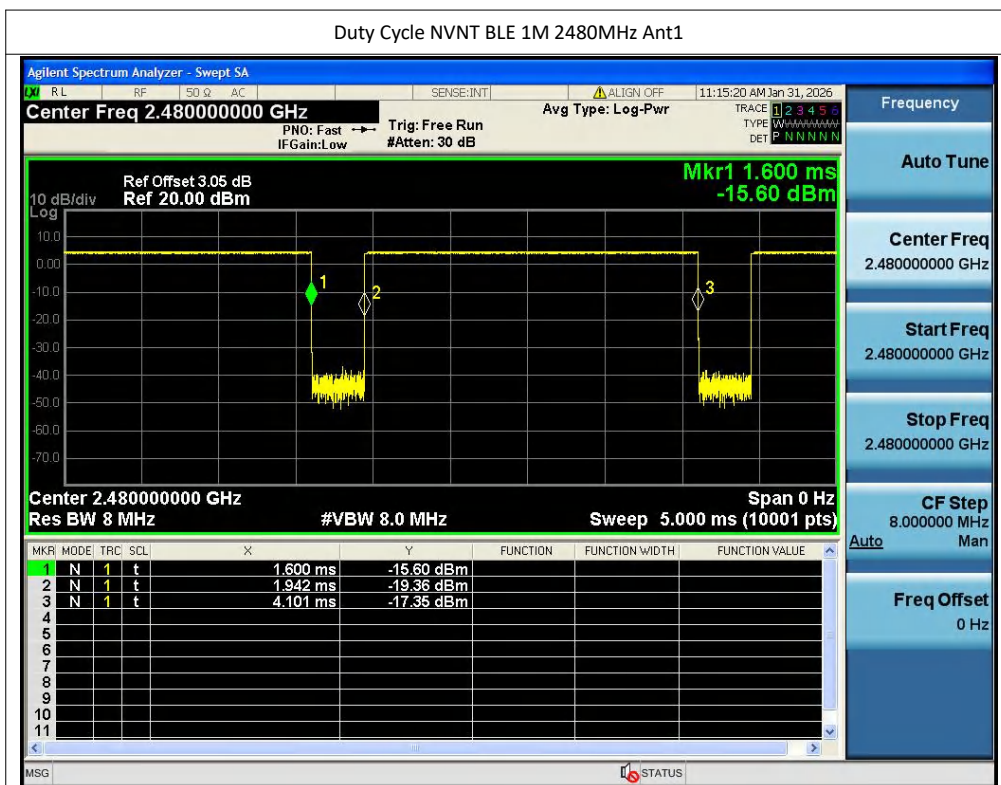
Test Graphs

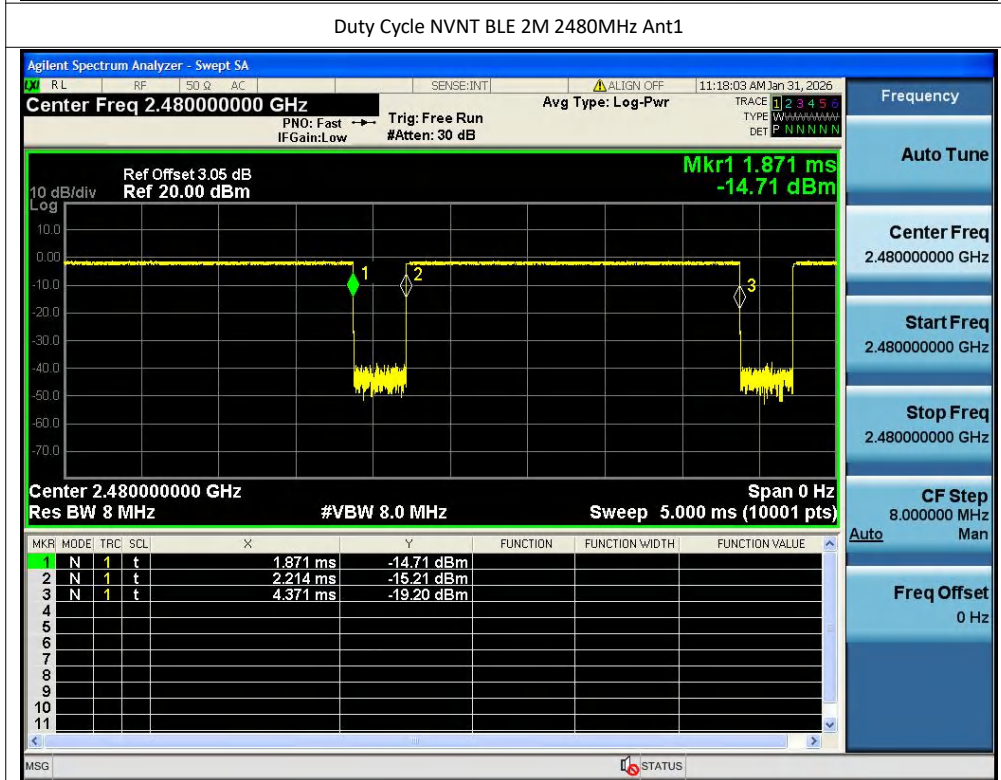
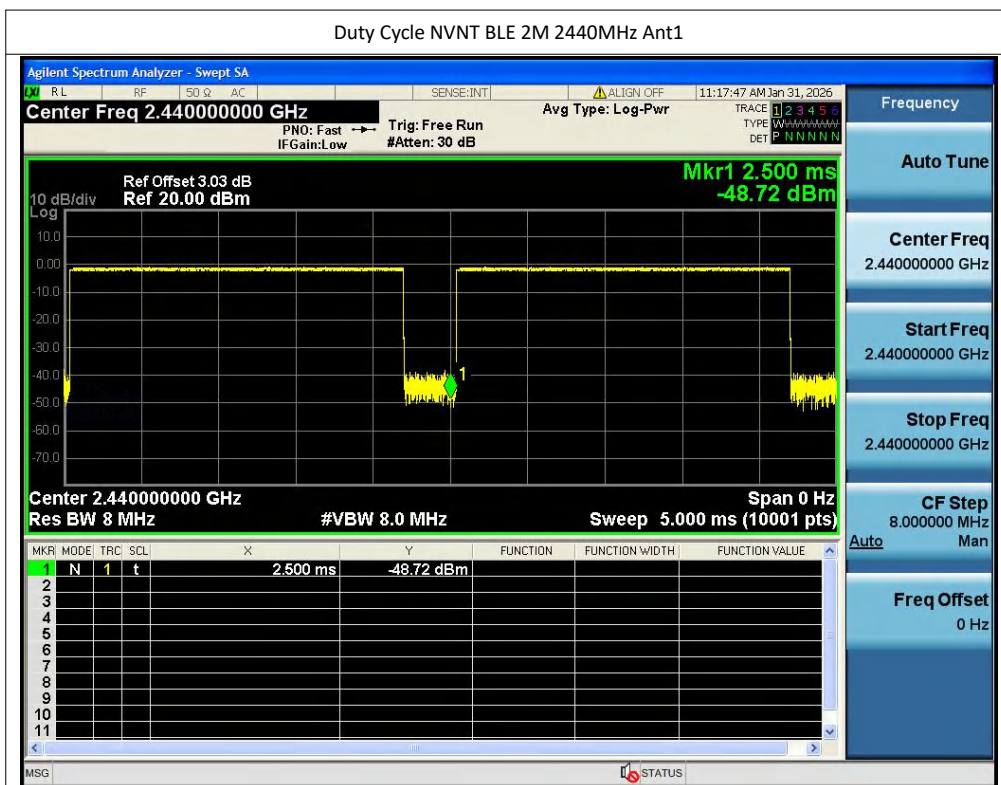
Duty Cycle NVNT BLE 1M 2402MHz Ant1



Duty Cycle NVNT BLE 1M 2440MHz Ant1





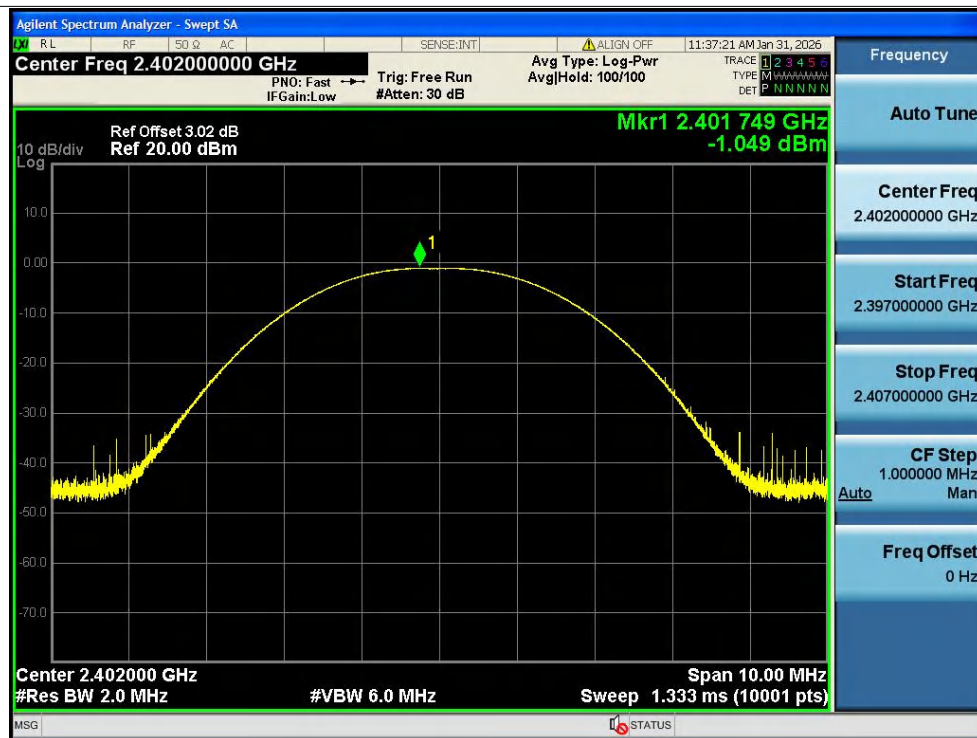


Maximum Conducted Output Power

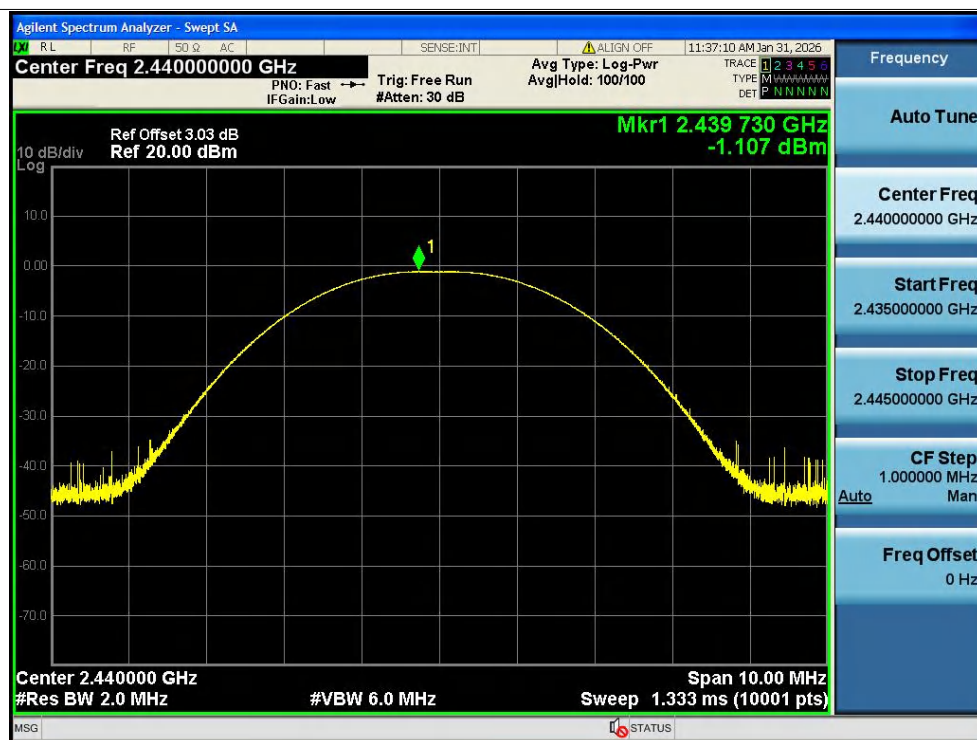
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	Ant1	-1.05	0	-1.05	30	Pass
NVNT	BLE 1M	2440	Ant1	-1.11	0	-1.11	30	Pass
NVNT	BLE 1M	2480	Ant1	-1.43	0	-1.43	30	Pass
NVNT	BLE 2M	2402	Ant1	-1.08	0	-1.08	30	Pass
NVNT	BLE 2M	2440	Ant1	-1.1	0	-1.1	30	Pass
NVNT	BLE 2M	2480	Ant1	-1.47	0	-1.47	30	Pass

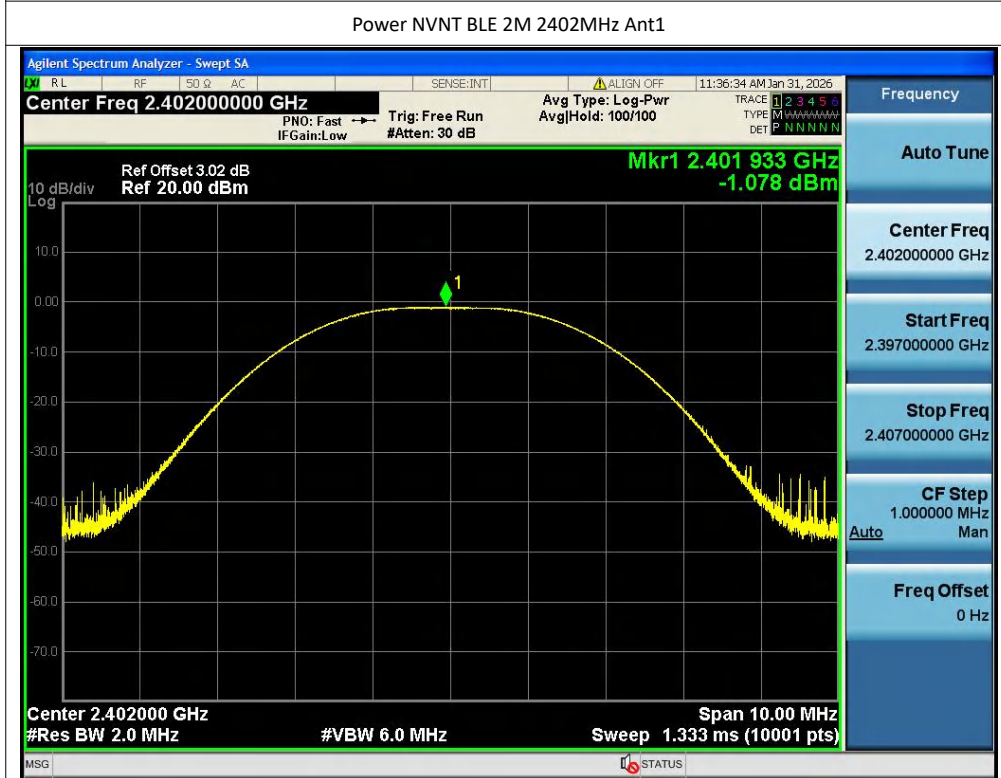
Test Graphs

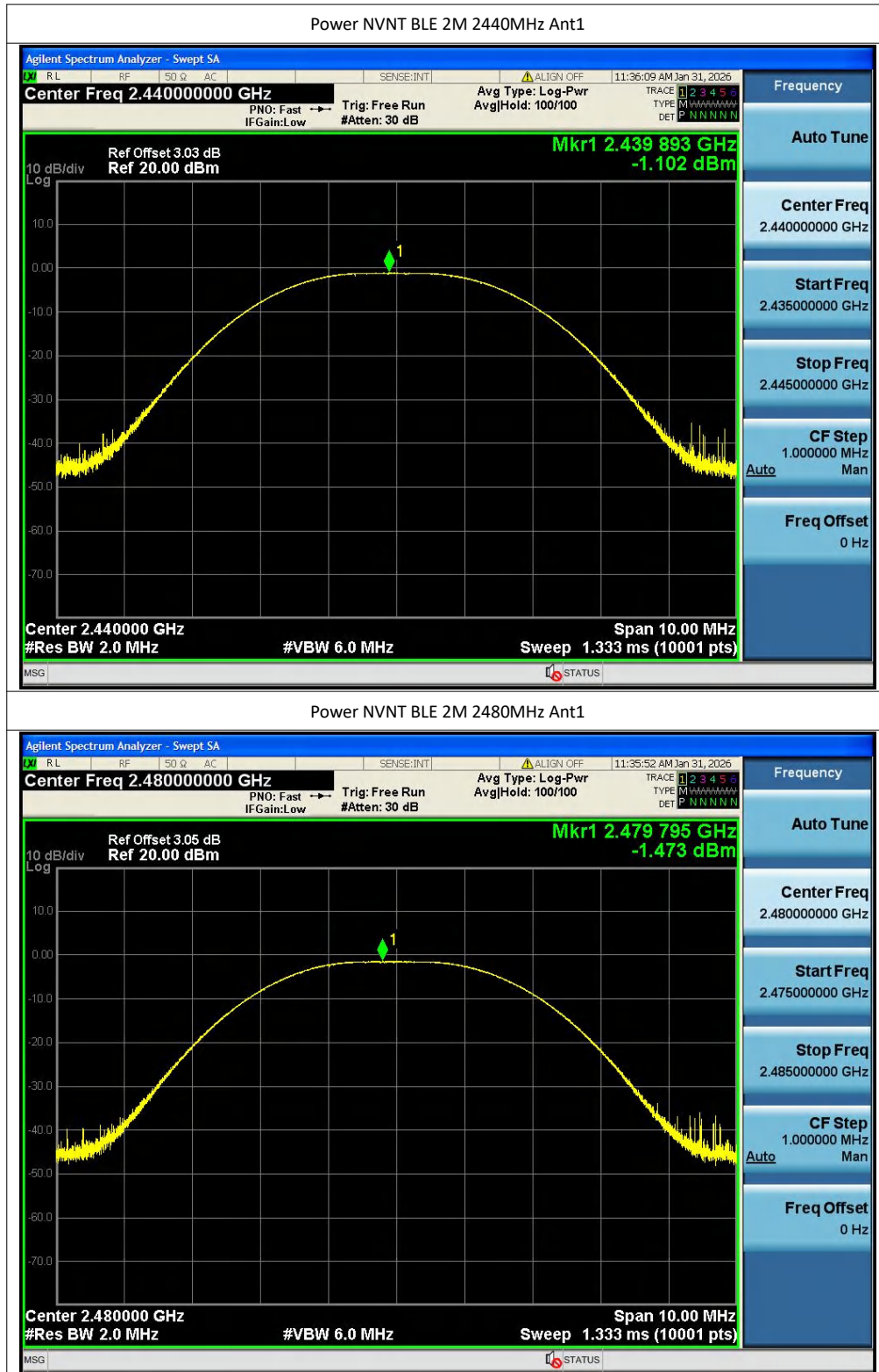
Power NVNT BLE 1M 2402MHz Ant1



Power NVNT BLE 1M 2440MHz Ant1







-6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1M	2402	Ant1	0.7083	0.5	Pass
NVNT	BLE 1M	2440	Ant1	0.7092	0.5	Pass
NVNT	BLE 1M	2480	Ant1	0.7213	0.5	Pass
NVNT	BLE 2M	2402	Ant1	1.887	0.5	Pass
NVNT	BLE 2M	2440	Ant1	1.868	0.5	Pass
NVNT	BLE 2M	2480	Ant1	1.883	0.5	Pass

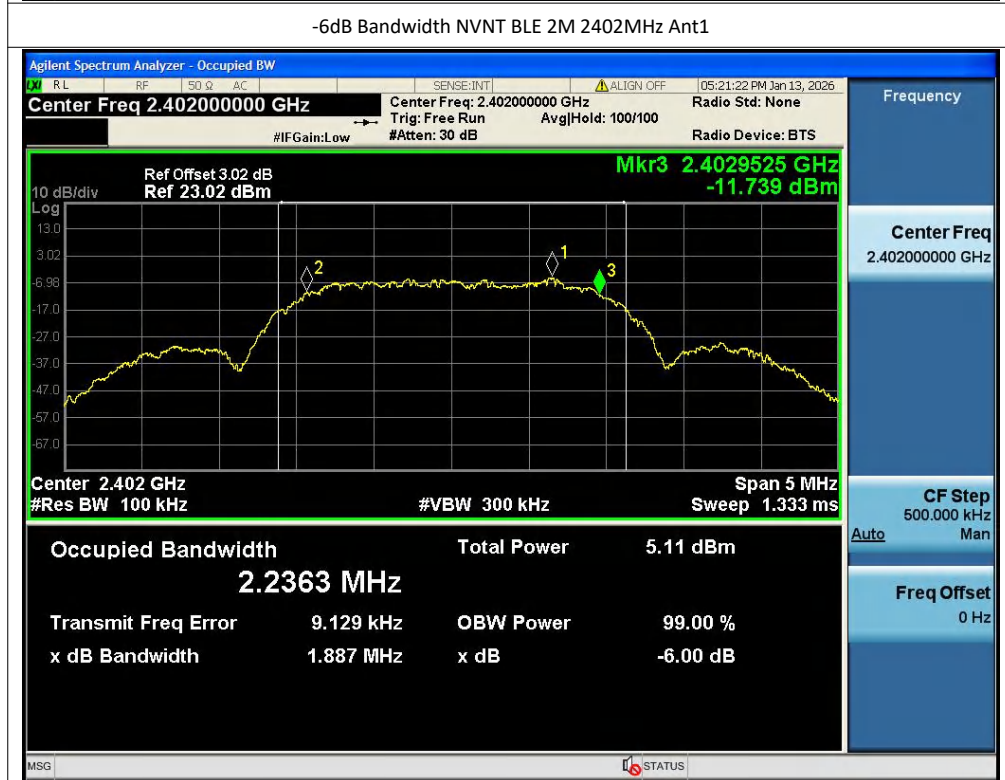
Test Graphs

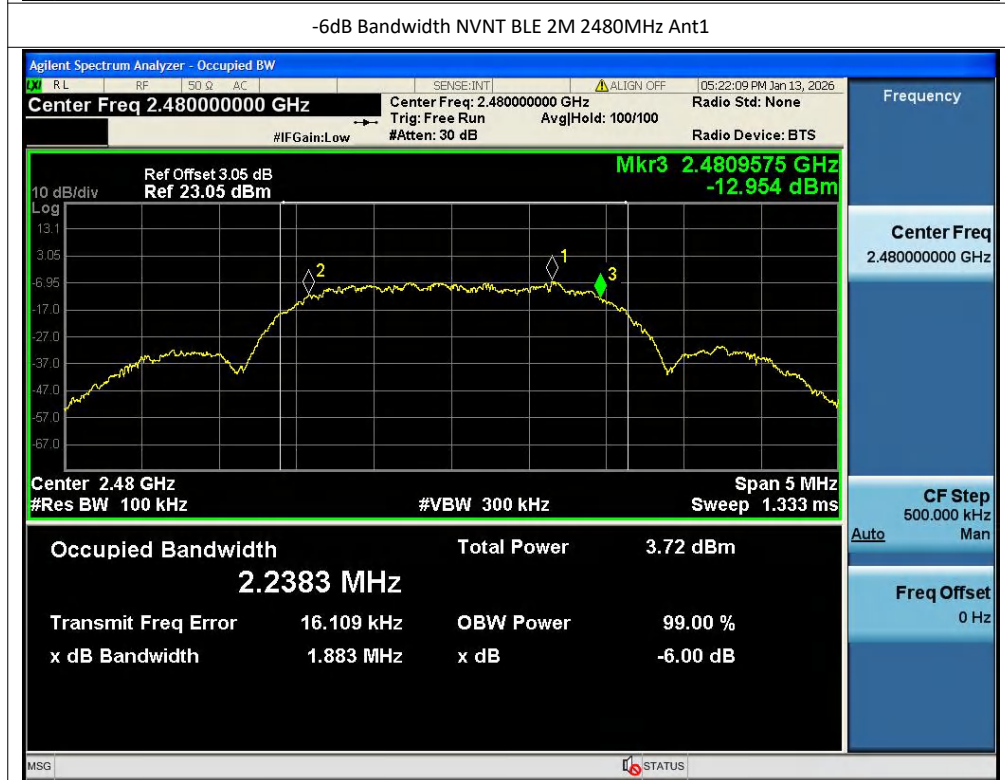
-6dB Bandwidth NVNT BLE 1M 2402MHz Ant1



-6dB Bandwidth NVNT BLE 1M 2440MHz Ant1







Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE 1M	2402	Ant1	1.0347
NVNT	BLE 1M	2440	Ant1	1.0361
NVNT	BLE 1M	2480	Ant1	1.0364
NVNT	BLE 2M	2402	Ant1	2.0602
NVNT	BLE 2M	2440	Ant1	2.0627
NVNT	BLE 2M	2480	Ant1	2.0779

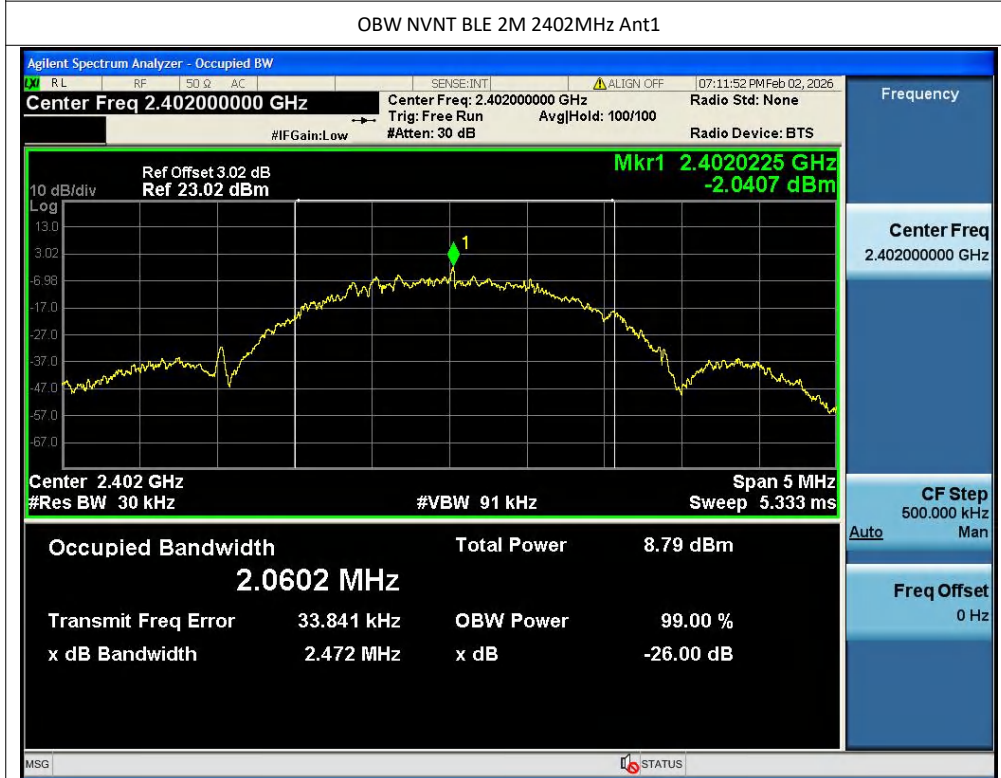
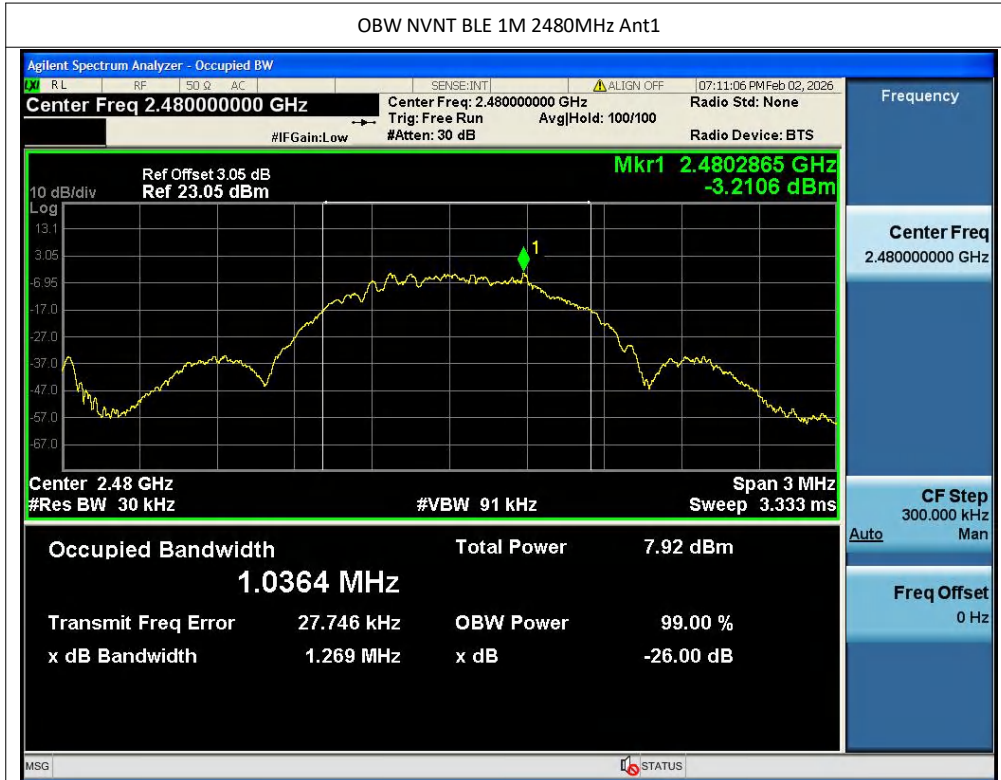
Test Graphs

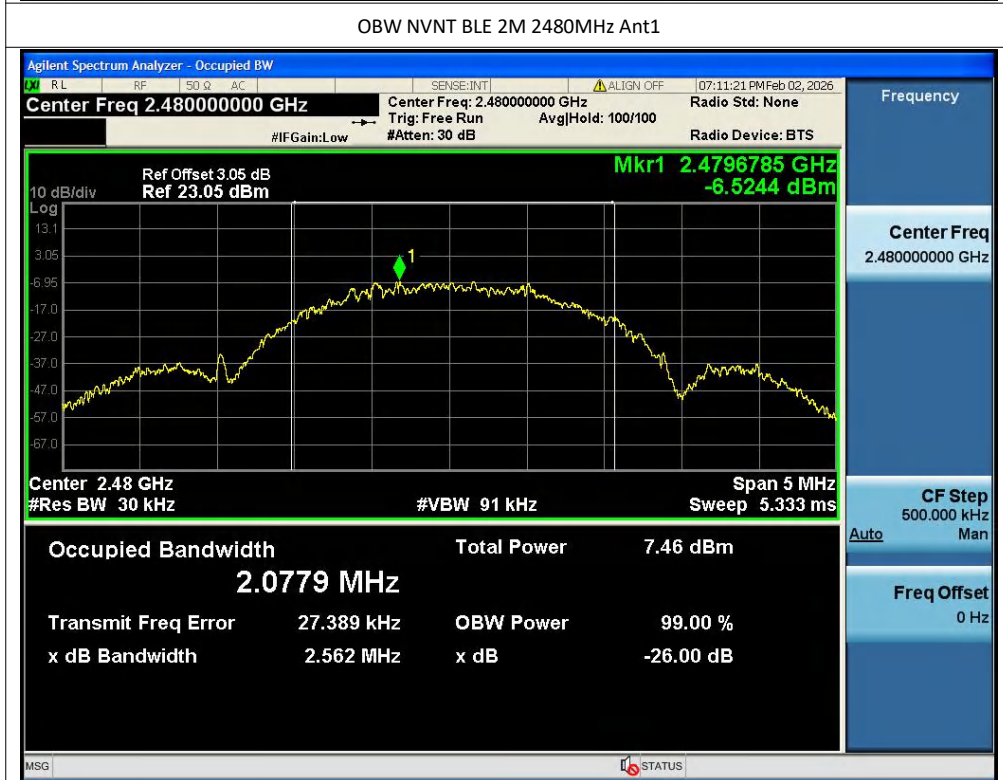
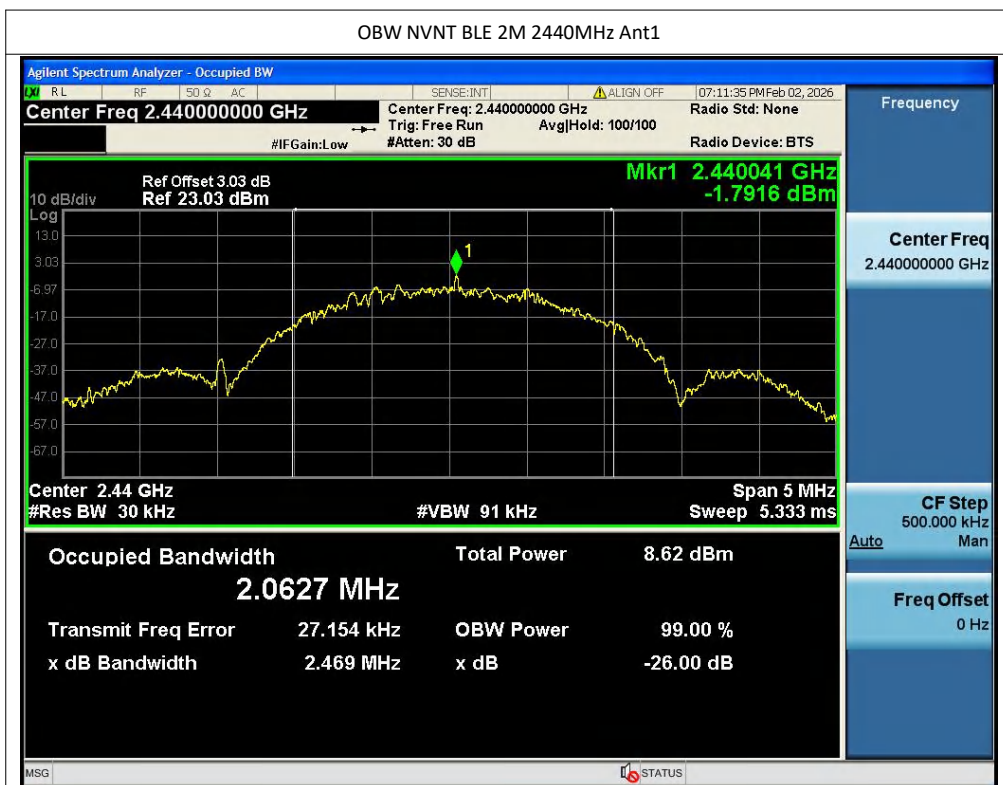
OBW NVNT BLE 1M 2402MHz Ant1



OBW NVNT BLE 1M 2440MHz Ant1







Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/100kHz)	Conducted PSD (dBm/3kHz)	Duty Factor (dB)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	BLE 1M	2402	Ant1	5.08	-10.15	0	-10.15	8	Pass
NVNT	BLE 1M	2440	Ant1	7.65	-7.58	0	-7.58	8	Pass
NVNT	BLE 1M	2480	Ant1	8.01	-7.22	0	-7.22	8	Pass
NVNT	BLE 2M	2402	Ant1	-2.33	-17.56	0	-17.56	8	Pass
NVNT	BLE 2M	2440	Ant1	-6.42	-21.65	0	-21.65	8	Pass
NVNT	BLE 2M	2480	Ant1	-7.74	-22.97	0	-22.97	8	Pass

Test Graphs

PSD NVNT BLE 1M 2402MHz Ant1



PSD NVNT BLE 1M 2440MHz Ant1





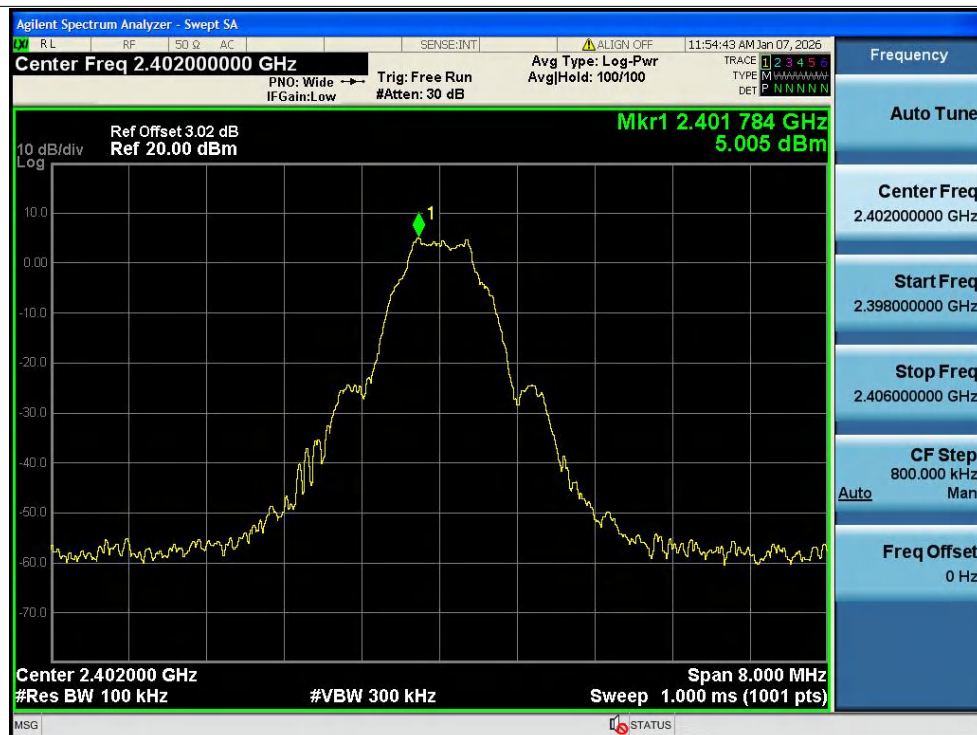


Band Edge

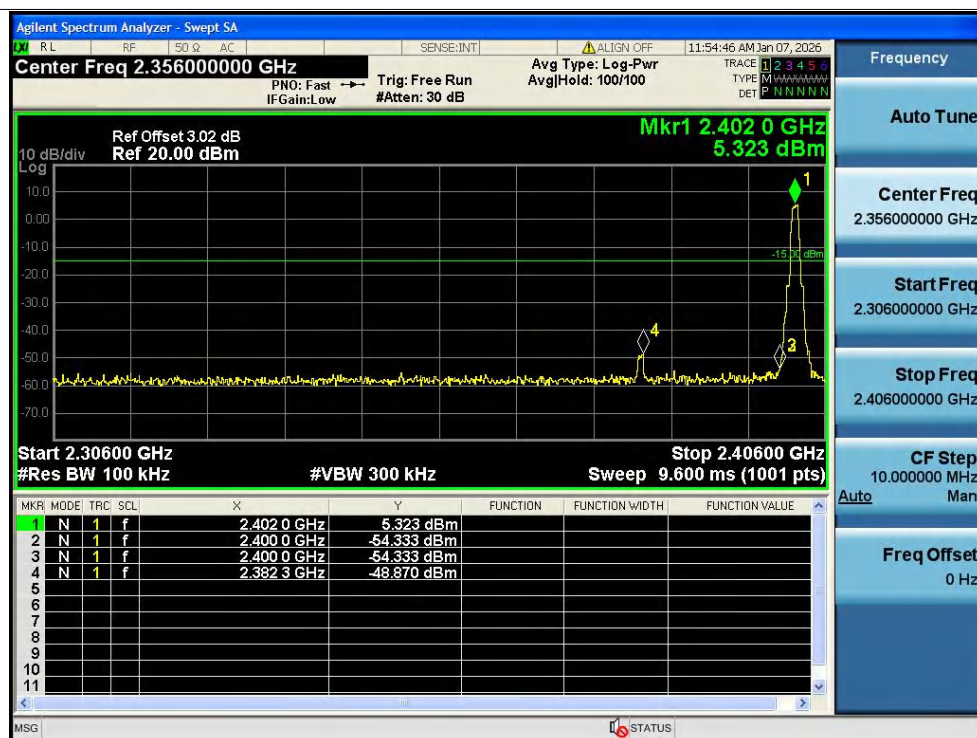
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-53.87	-20	Pass
NVNT	BLE 1M	2480	Ant1	-62.36	-20	Pass
NVNT	BLE 2M	2402	Ant1	-52.28	-20	Pass
NVNT	BLE 2M	2480	Ant1	-47.21	-20	Pass

Test Graphs

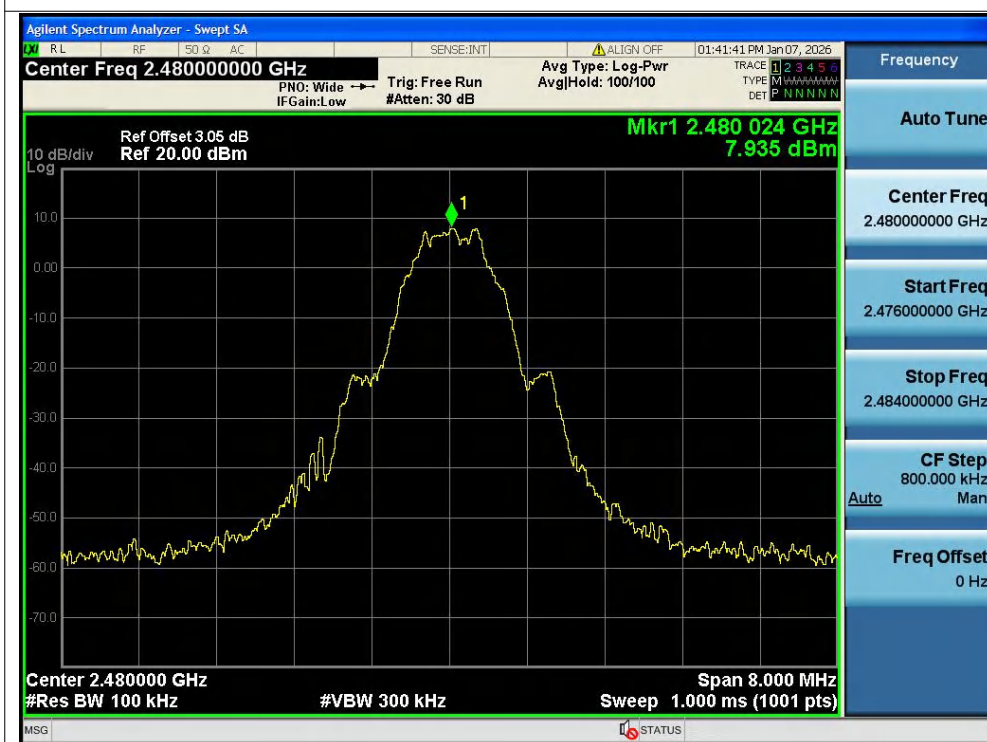
Band Edge NVNT BLE 1M 2402MHz Ant1 Ref



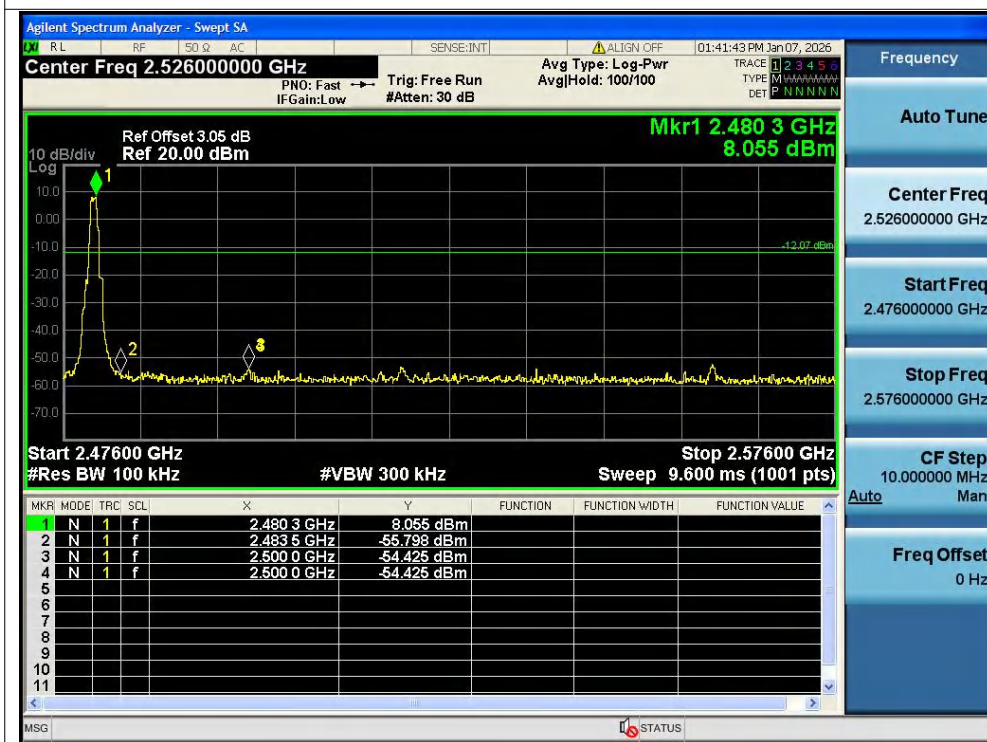
Band Edge NVNT BLE 1M 2402MHz Ant1 Emission



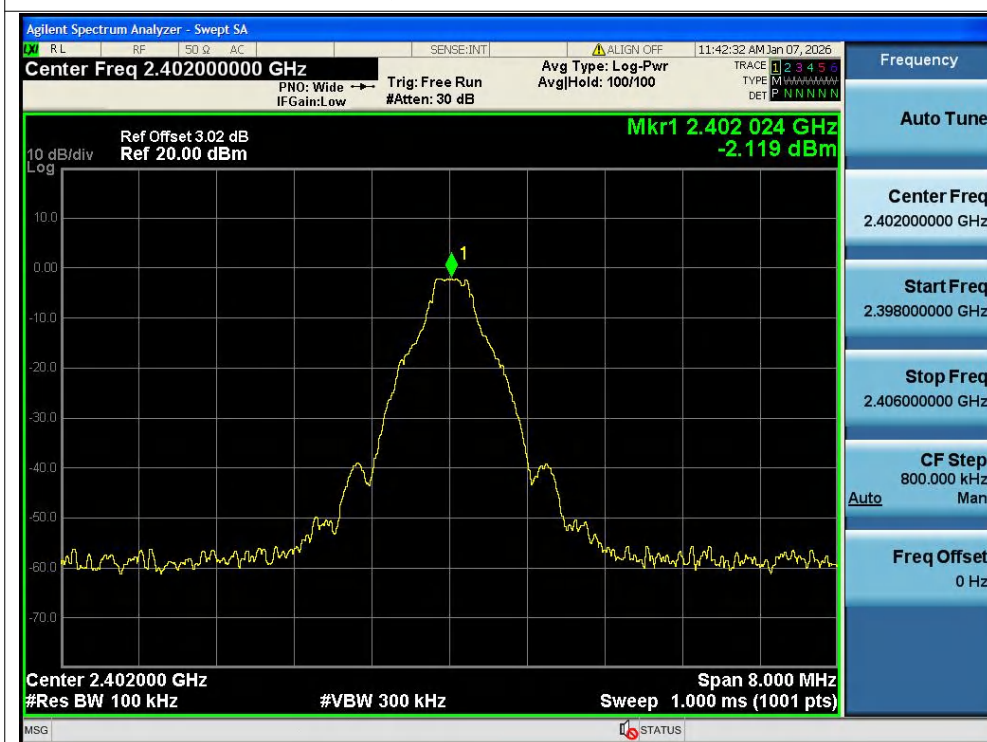
Band Edge NVNT BLE 1M 2480MHz Ant1 Ref



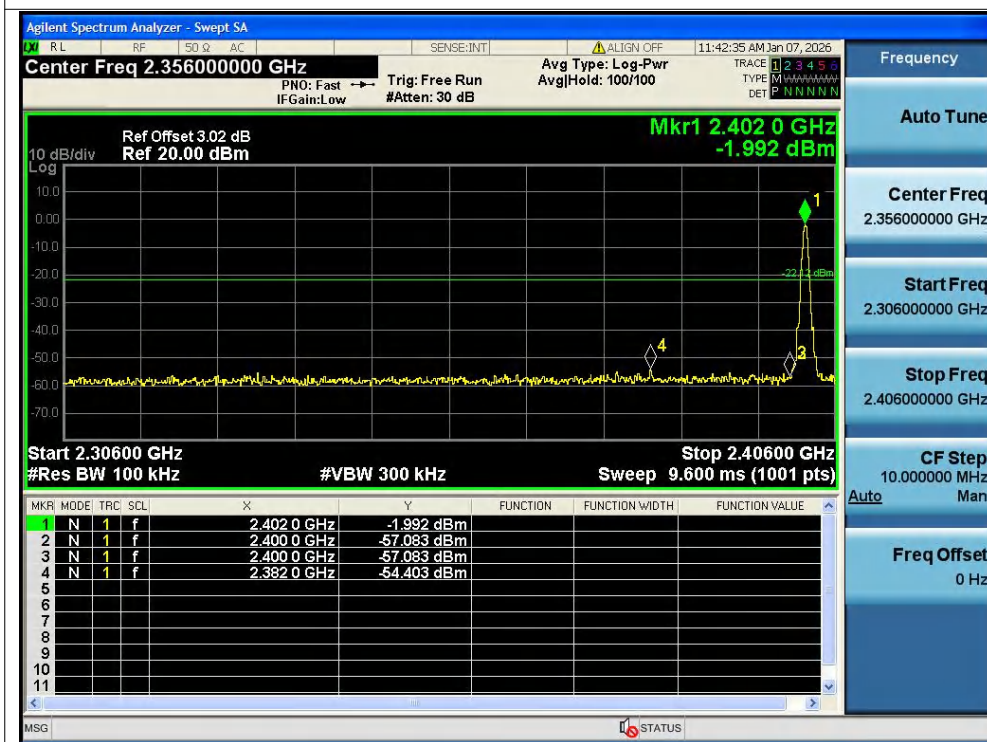
Band Edge NVNT BLE 1M 2480MHz Ant1 Emission



Band Edge NVNT BLE 2M 2402MHz Ant1 Ref



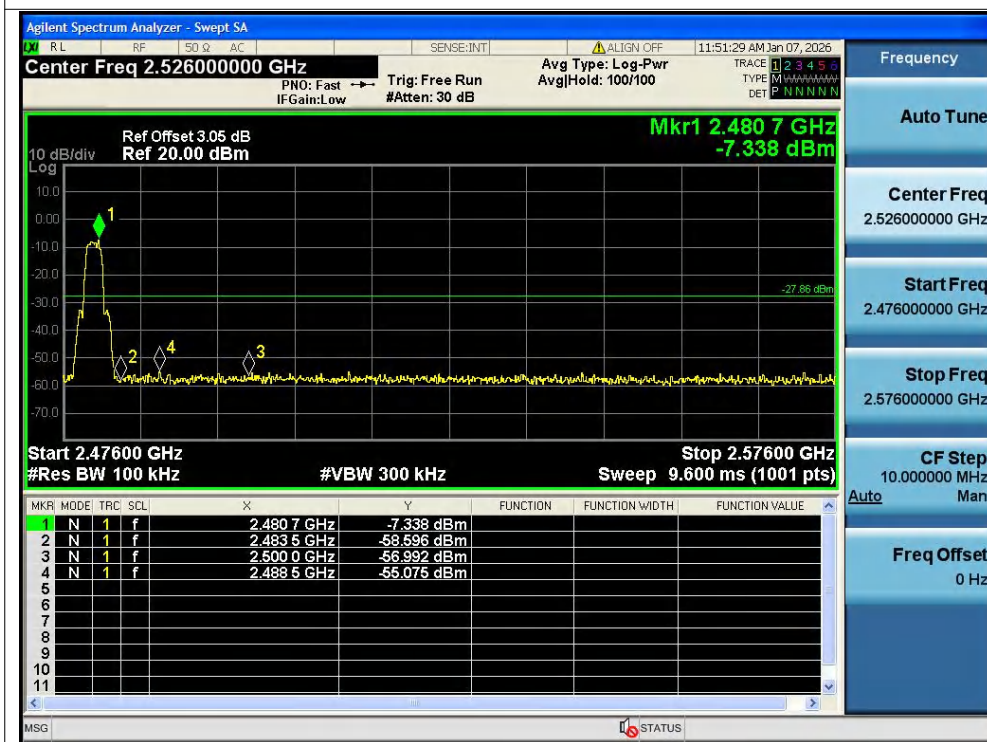
Band Edge NVNT BLE 2M 2402MHz Ant1 Emission



Band Edge NVNT BLE 2M 2480MHz Ant1 Ref



Band Edge NVNT BLE 2M 2480MHz Ant1 Emission



Conducted RF Spurious Emission

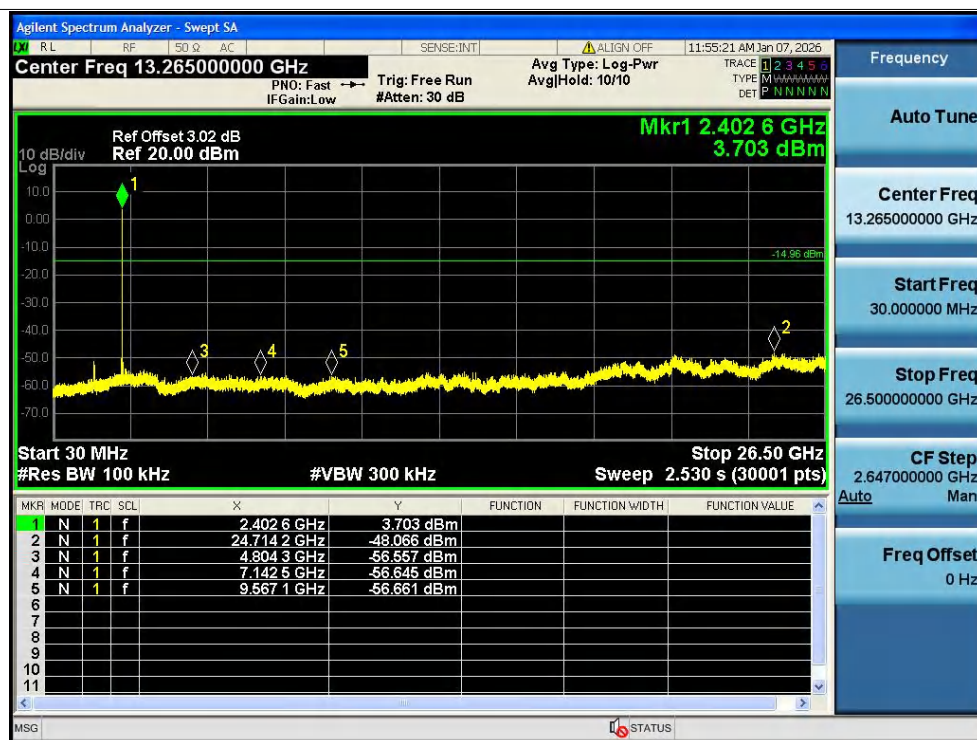
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-53.1	-20	Pass
NVNT	BLE 1M	2440	Ant1	-55.67	-20	Pass
NVNT	BLE 1M	2480	Ant1	-54.42	-20	Pass
NVNT	BLE 2M	2402	Ant1	-45.79	-20	Pass
NVNT	BLE 2M	2440	Ant1	-41.6	-20	Pass
NVNT	BLE 2M	2480	Ant1	-39.73	-20	Pass

Test Graphs

Tx. Spurious NVNT BLE 1M 2402MHz Ant1 Ref



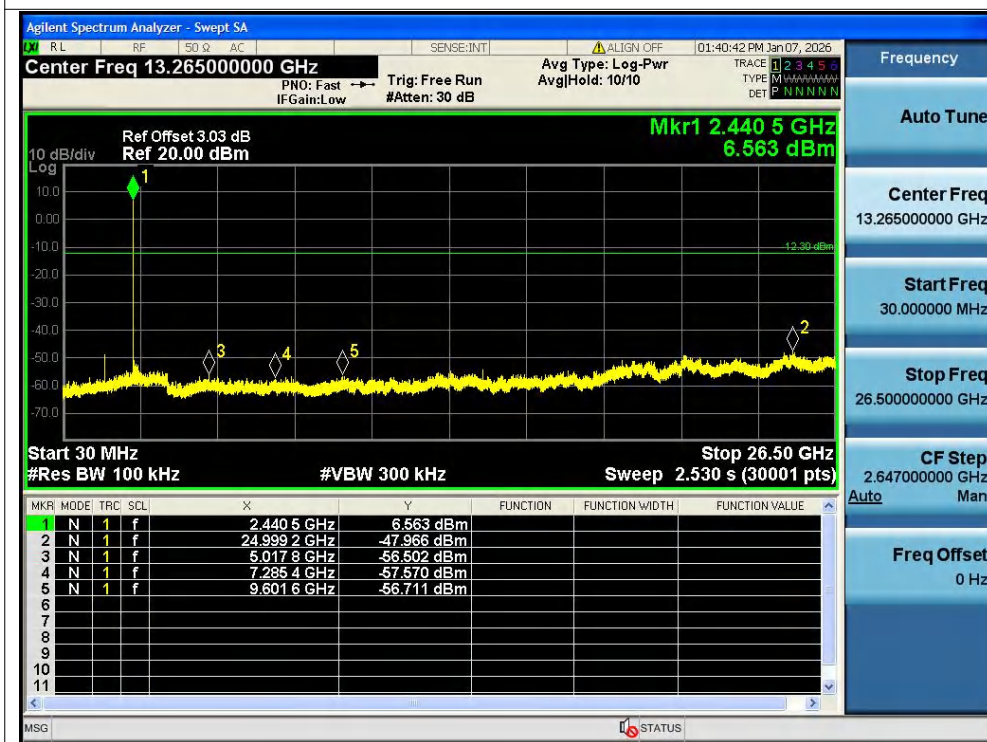
Tx. Spurious NVNT BLE 1M 2402MHz Ant1 Emission



Tx. Spurious NVNT BLE 1M 2440MHz Ant1 Ref



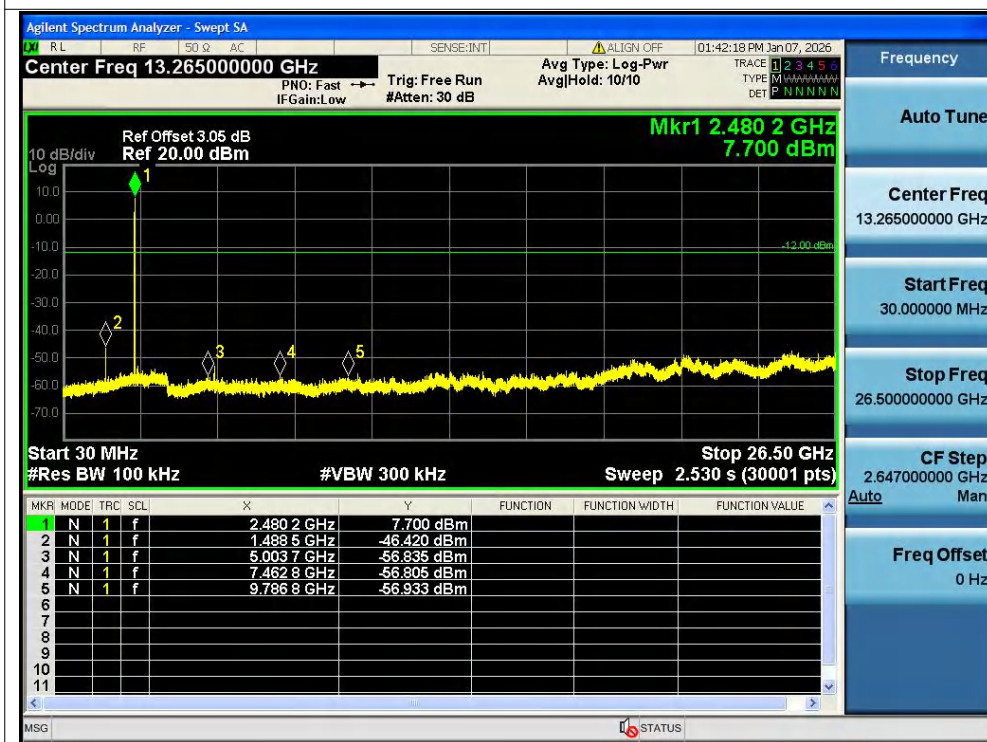
Tx. Spurious NVNT BLE 1M 2440MHz Ant1 Emission



Tx. Spurious NVNT BLE 1M 2480MHz Ant1 Ref



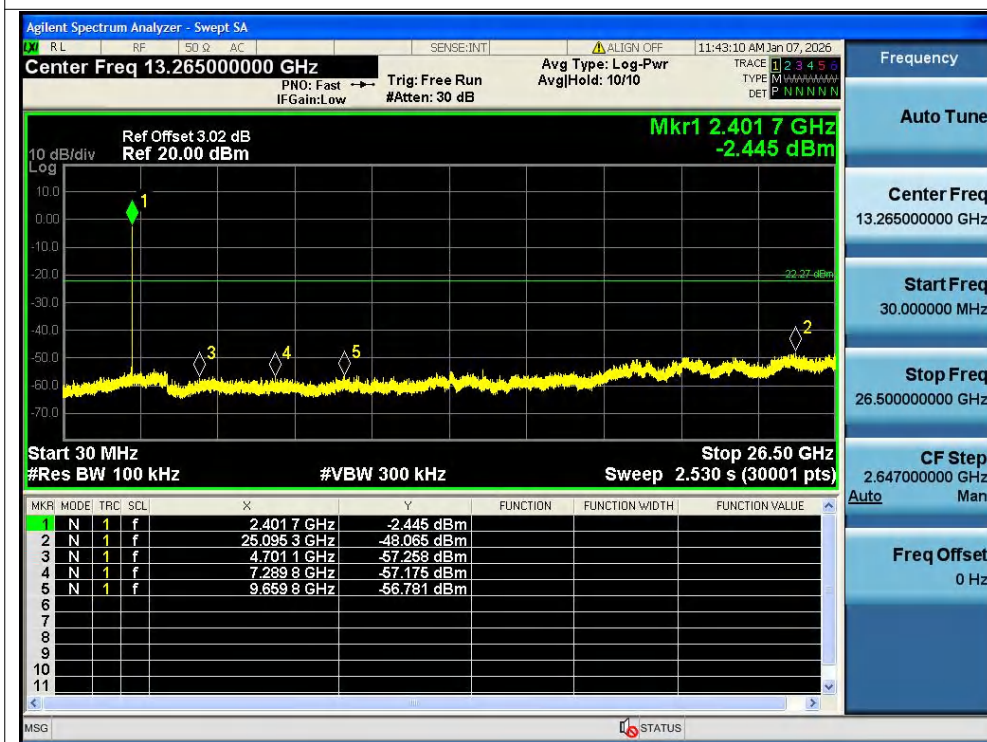
Tx. Spurious NVNT BLE 1M 2480MHz Ant1 Emission



Tx. Spurious NVNT BLE 2M 2402MHz Ant1 Ref



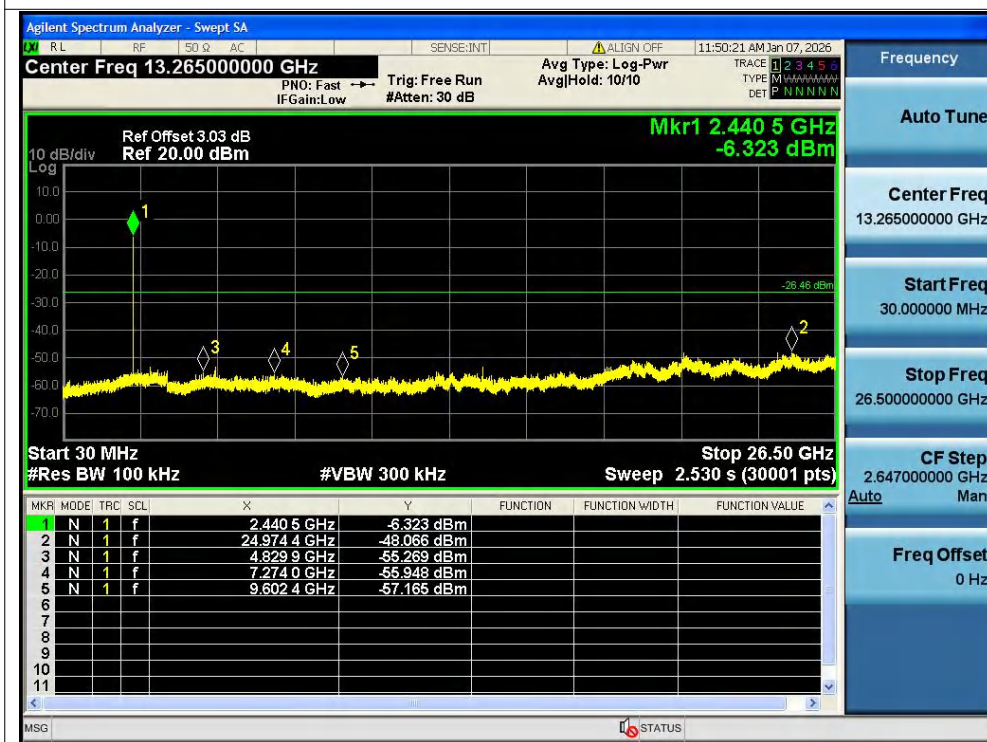
Tx. Spurious NVNT BLE 2M 2402MHz Ant1 Emission



Tx. Spurious NVNT BLE 2M 2440MHz Ant1 Ref



Tx. Spurious NVNT BLE 2M 2440MHz Ant1 Emission



Tx. Spurious NVNT BLE 2M 2480MHz Ant1 Ref



Tx. Spurious NVNT BLE 2M 2480MHz Ant1 Emission

